



Form PTO-1449

**INFORMATION DISCLOSURE CITATION
IN AN APPLICATION**

(Use several sheets if necessary)

ATTY. DOCKET NO.
0020-5146PAPPLICATION NO.
10/609,503APPLICANT
Yoshinori SHIMIZU et al.FILING DATE
July 1, 2003GROUP
2879**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	Kind	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
AW	US 4,644,223		1987-02-17	de Hair et al.			
AW	US 6,538,371	B1	2003-03-25	Duggal et al.			
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FOREIGN PATENT DOCUMENTS

	Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
								YES	NO
AW	EP	0 500 937	A1	1992-09-02	EUROPE			X	
AW	JP	2001-320094	A	2001-11-16	JAPAN			Abs	

OTHER DOCUMENTS

(Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)

AW Sato et al. "Full-Color Fluorescent Display Devices Using a Near-UV Light-Emitting Diode", Japanese Journal of Applied Physics, vol. 35, July 1, 1996, pp. L838-L839.

EXAMINER

Joseph Williams

DATE CONSIDERED

4/24/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449				ATTY DOCKET NO. 0020-5146		APPLICATION NO. New-Rule 53(b) Div. of 09/458,024			
INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)				APPLICANT Yoshinori SHIMIZU et al.					
				FILING DATE July 1, 2003		GROUP 2879			
U.S. PATENT DOCUMENTS									
EXAMINER INITIAL	DOCUMENT NUMBER	Kind	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE		
JW	US 3,652,956		1972-03-28	Pinnow et al.					
JW	US 4,314,910		1982-02-09	Barnes					
JW	US 5,006,908		1991-04-09	Matsuoka et al.					
JW	US 5,369,289		1994-11-29	Tamaki et al.					
FOREIGN PATENT DOCUMENTS									
	Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
								YES	NO
JW	JP	59-30107	U	1984-02-24	JAPAN				X
JW	JP	7-32638	U	1995-06-16	JAPAN			X	
JW	JP	01-257993	A	1989-10-16	JAPAN			ABS	
JW	JP	01-260707	A	1989-10-18	JAPAN			ABS	
JW	JP	02-111922	A	1990-04-24	JAPAN			ABS	
JW	JP	05-142424	A	1993-06-11	JAPAN			X	
JW	JP	06-160635	A	1994-06-07	JAPAN			X	
JW	JP	06-027327	A	1994-02-04	JAPAN			X	
JW	JP	06-82633	A	1994-03-25	JAPAN			X	
OTHER DOCUMENTS (Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)									
JW	"White LED lamp: Efficient light-emitting; Manufacture cost half", Nikkei Sangyo Shimbun, September 13, 1996, Published by Nihon Keizai Shimbunsha.								
JW	Shuji NAKAMURA, "InGaN/AlGaN blue-light-emitting diodes", J. Vac. Sci. Technol. A 13(3), May/Jun 1995, pp.705-710.								
JW	Shuji NAKAMURA et al., "Si-Doped InGaN Films Grown on GaN Films", Jpn. J. Appl. Phys. Vol. 32 (1993), pp. L16-L19, Part 2, No. 1A/B, 15 January 1993.								
JW	Shuji NAKAMURA et al., "P-GaN/N-InGaN/N-GaN Double-Heterostructure Blue-Light-Emitting Diodes", Jpn. J. Appl. Phys. Vol. 32 (1993), pp. L8-L11, Part 2, No. 1A/B, 15, January 1993.								
JW	Shuji NAKAMURA, "Zn-doped InGaN growth and InGaN/AlGaN double-heterostructure blue-light-emitting diodes", Journal of Crystal Growth, 145 (1994), pp. 911-917. <i>no month</i>								
JW	Shuji NAKAMURA, "High-Power InGaN/AlGaN Double-Heterostructure Blue-Light-Emitting Diodes", IEDM 94 (1994), IEEE, pp. 567-570. <i>no month</i>								
JW	Kozo OSAMURA et al., "Preparation and optical properties of Ga _{1-x} In _x N thin films", Journal of Applied Physics, Vol. 46, No. 8, August 1975, pp. 3432-3437.								
EXAMINER: <i>Joseph M. Ellison</i>						DATE CONSIDERED 12/6/04			
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FOREIGN PATENT DOCUMENTS									
	Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
								YES	NO
dw	JP	07-114904	A	1995-05-02	JAPAN			X	
dw	JP	07-235207	A	1995-09-05	JAPAN			X	
dw	JP	53-7153		1978-01-21	JAPAN				X
dw	JP	7-42152	U	1995-07-21	JAPAN			X	
dw	JP	55-4898	A	1980-01-14	JAPAN				X
dw	JP	55-005533	A	1980-01-16	JAPAN			ABS	
dw	JP	60-185457	A	1985-09-20	JAPAN			ABS	
dw	JP	62-20237	A	1987-01-28	JAPAN				X
dw	JP	62-232827	A	1987-10-13	JAPAN				X
OTHER DOCUMENTS (Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)									
dw	Takashi MATSUOKA et al., "Growth and Properties of a Wide-Gap Semiconductor InGaN", Optoelectronics-Devices and Technologies, Vol. 5, No. 1, pp.53-64, June 1990.								
dw	T. NAGATOMO et al., "Ga _{1-x} In _x N Blue Light-Emitting Diodes", Proc. Electrochem. Soc., 1993, Vol. 93-10, pp. 136-141. <i>no month</i>								
dw	G. BLASSE et al., "Investigation of Some Ce ³⁺ -Activated Phosphors", Journal of Chemical Physics, Vol. 47, No. 12, 15 December 1967.								
dw	W.W. HOLLOWAY, Jr. et al., "On The Fluorescence of Cerium - Activated Garnet Crystals", Physics Letters, Vol. 25A, No. 8, 23 October 1967, pp. 614-615.								
	E.F. GIBBONS et al., "Some Factors Influencing the Luminous Decay Characteristics of Y₃Al₅O₁₂:Ce³⁺", J. Electrochem. Soc., Vol. 120, No. 6. <i>no year, no month</i>								
dw	W.J. MINISCALCO et al., "Measurements of Excited-State Absorption in Ce ³⁺ :YAG ³⁺ ", J. Appl. Phys. Vol. 49, No. 12, December 1978, pp. 6109-6111.								
	D.J. ROBBINS et al., "Lattice Defects and Energy Transfer Phenomena in Y ₃ Al ₅ O ₁₂ :Ce ³⁺ ", pp. 1004-1013. <i>no year, no month</i>								
EXAMINER <i>Joseph Wilkins</i>					DATE CONSIDERED <i>12/6/04</i>				
<small>EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.S.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>									

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FOREIGN PATENT DOCUMENTS									
	Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
								YES	NO
JW	JP	01-189695	A	1989-07-28	JAPAN			ABS	
JW	JP	07-120754	A	1995-05-12	JAPAN			X	
JW	JP	06-177423	A	1994-06-24	JAPAN			X	
JW	JP	7-99345	A	1995-04-11	JAPAN			X	
JW	JP	09-027642	A	1997-01-28	JAPAN			X	
JW	JP	05-63068	U	1993-08-20	JAPAN			X	
JW	EP	0 209 942	A1	1987-01-28	EPO				
JW	EP	0 541 373	A2	1992-11-05	EPO				
JW	EP	0 599 224	A1	1994-06-01	EPO				
OTHER DOCUMENTS (Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)									
	M.F. YAN et al., "Preparation of Y,Al ₂ O ₃ -Based Phosphor Powders, J. Electrochem. Soc., Vol. 134, No. 2. no year								
JW	"Nichia Chemical starts the sample shipment of white light emitting diode", News Report, translation of page 15 of Nikkei Electronics 1996.9.23 (No. 671).								
	"Proceedings of the Institute of Phosphor Society", Translation of pages 1, 5 to 14 of the 26 th Proceedings of the Institute of Phosphor Society. no year								
	Shigeo SHIONOYA et al. (editors), "Phosphor Handbook", pp. 505-508, CRC Press. no year								
EXAMINER <i>[Signature]</i>					DATE CONSIDERED 12/6/04				
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Form PTO-1449				ATTY DOCKET NO. 0020-5146P		APPLICATION NO. Rule 53(b) Div. of 09/458,024		
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EXAMINER INITIAL	DOCUMENT NUMBER	Kind	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE	
JW	US 4,727,283		1988-02-23	van Kemenade et al				
JW	US 4,298,820		1981-11-03	Bongers et al.				
JW	US 3,699,478		1972-10-17	Pinnow et al.				
JW	US 5,798,537		1998-08-25	Nitta				
JW	US 5,202,777		1993-04-13	Sluzky et al.				
JW	US 3,819,974		1974-06-25	Stevenson et al.				
JW	US 5,847,507		1998-12-08	Butterworth et al.				
JW	US 3,691,482		1972-09-12	Pinnow et al.				
	US							
FOREIGN PATENT DOCUMENTS								
Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
JW	JP 01179471	A	1989-07-17	JAPAN			ABS	
JW	JP 5043913	C1	1975-04-21	JAPAN				
JW	JP 554898	A	1980-01-14	JAPAN				
JW	JP 09027642	A	1997-01-28	JAPAN			ABS	
JW	JP 08007614	A	1996-01-12	JAPAN			ABS	
JW	JP 07176794	A	1995-07-14	JAPAN			ABS	
JW	JP 07099345	A	1995-04-11	JAPAN			ABS	
JW	JP 05152609	A	1993-06-18	JAPAN			ABS	
JW	JP 6220237	A	1987-01-28	JAPAN				
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JW	Glasse et al., Applied Physics Letters, Vol. 11, No. 2, pp. 53-54 (1967) <div style="text-align: right;">no month</div>							
JW	Hoffman, Journal of Ies, pp. 89-91 (1977) <div style="text-align: right;">no month</div>							
JW	Nakamura, SPIE, Vol. 3002, pp. 26-35 (1997) <div style="text-align: right;">no month</div>							
JW	"SIMENS SMT-TOPLED fur die Oberflachenmontage" Frank Mollmer et al. Simens Components, 29 (1991) Hfet 4. <div style="text-align: right;">no month</div>							
EXAMINER Joseph Williams				DATE CONSIDERED 12/6/04				
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<i>AW</i>	US 4,550,256		1985-10-29	Berkstesser et al.					
	US 4,716,337		1987-12-29	Huiskes et al.					
	US 5,471,113		1995-11-28	De Backer et al.					
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FOREIGN PATENT DOCUMENTS									
	Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
								YES	NO
<i>AW</i>	WO	9750132	A1	1997-12-31	PCT				
	WO	9812757	A1	1998-03-26	PCT				
	JP	5079379		1973-11-24	JAPAN			ABS	
<i>AW</i>	JP	742152		1995-07-21	JAPAN			ABS	
	JP	4717684		1972-09-09	JAPAN			X	
	JP	491221		1974-01-12	JAPAN			X	
<i>AW</i>	JP	49112577		1974-10-26	JAPAN			ABS	
	JP	62189770		1986-02-15	JAPAN			ABS	
	JP	291980		1988-09-29	JAPAN			ABS	
OTHER DOCUMENTS (Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)									
<i>AW</i>	"GaPnp Contact Blue/Ultraviolet light Emitting Diode", H. Amano et al., Applied Physics, Vol. 20, No. 2, pp. 163-166 (1991) <i>no month</i>								
<i>AW</i>	"Phosphors Based on Rare-Earths, A New Era in Fluorescent Lighting", B.M.J. Smets, Materials Chemistry and Physics, 16 pp. 283-299 (1987) <i>no month</i>								
<i>AW</i>	"A New Phosphor for Flying-Spot Cathode-Ray Tubes for Color Television: Yellow Emitting...", G. Blasse et al., App. Phys. Lett. Vol. 11, No. 2, pp. 53-55 (1967) <i>no month</i>								
<i>AW</i>	Tadao MIURA, ELECTRONICS ENGINEERING, "High-intensity White Backlighting for LCD of Car Audios", July 1996, Vol. 38, No. 7, pp. 55-58								
EXAMINER <i>Joseph V. Collins</i>					DATE CONSIDERED <i>12/6/04</i>				
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								YES	NO
<i>an</i>	JP	5152609	A	1993-06-18	JAPAN			ABS	
<i>an</i>	JP	5183189	A	1993-07-23	JAPAN			ABS	
<i>an</i>	JP	863119		1996-03-08	JAPAN			ABS	
<i>an</i>	JP	10036835	A	1998-02-10	JAPAN			ABS	
<i>an</i>	JP	49106283		1972-12-27	JAPAN			ABS	
<i>an</i>	JP	5245181		1977-10-14	JAPAN			ABS	
<i>an</i>	GB	1589964		1981-05-20	GREAT BRITAIN				
<i>an</i>	JP	5441660		1979-12-05	JAPAN			X	
<i>an</i>	JP	5472484		1978-11-07	JAPAN			ABS	

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<i>an</i>	J.M. Robertson, et al., "Colourshift of the Ce ³⁺ Emission in Monocrystalline Epitaxially Grown Garnet Layers", 1981 Philips J. Res. 36, pp. 15-30 <i>no month</i>
<i>an</i>	W.W. Holloway, Jr. et al., "Optical Properties of Cerium-Activated Garnet Crystals", 1969 Journal of the Optical Society of America, Vol. 59, No. 1, pp. 60-63 <i>no month</i>
<i>an</i>	WUSTLICH MIKRO-/OPTO-ELEKTRONIK GMBH (1994/1995) <i>no month</i>

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								YES	NO
	JP	5950455		1984-04-01	JAPAN			ABS	
	JP	324692		1991-03-14	JAPAN			ABS	
	JP	463162		1992-05-29	JAPAN			ABS	
	JP	463163		1992-05-29	JAPAN			X	
	JP	563068		1993-08-20	JAPAN			ABS	
	JP	8170077		1996-07-02	JAPAN			ABS	
	JP	5331584		1978-03-24	JAPAN				
	JP	60144381		1985-07-30	JAPAN			ABS	
JP	62167387		1987-07-23	JAPAN			ABS		
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								YES	NO
JW	JP	60144381		1985-07-30	JAPAN			ABS	
JW	JP	62167387		1987-07-23	JAPAN			ABS	
JW	JP	6208845		1994-07-26	JAPAN			ABS	
JW	JP	06177423		1994-06-24	JAPAN			ABS	
JW	JP	06260680		1994-09-16	JAPAN			ABS	
JW	JP	06268257		1994-09-22	JAPAN			ABS	
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